

WHAT IS CLAIMED IS:

1. A data service apparatus comprising:

storage means for storing digital data;

an encryption circuit that encrypts digital data into encrypted data; and

a decryption circuit that decrypts encrypted data into its initial digital data, and

wherein

digital data, to be backed up, of digital data stored in the storage means is extracted, encrypted by the encryption circuit into encrypted data and stored in an external storage unit; and

encrypted data, to be decrypted, of the encrypted data stored in the external storage unit is extracted, decrypted by the decryption circuit into the initial digital data and written back to the storage means.

2. The apparatus according to claim 1, further comprising an identification code generation circuit that generates an identification code unique to the apparatus itself, and wherein

the encryption circuit performs the encryption according to the identification code generated by the identification code generation circuit; and

the decryption circuit performs the decryption according to the identification code generated by the identification code generation circuit.

3. The apparatus according to claim 2, further comprising a falsification detection circuit that checks, when decrypting the digital data from the encrypted data, the

digital data according to the identification code generated by the identification code generation circuit, and inhibits the initial digital data from being written back to the storage means when it is found, by the checking, that the digital data has been falsified.

4. The apparatus according to any one of claims 1, 2 and 3, further comprising a comparison circuit that makes a comparison in attribute data between the digital data in the storage means and that stored in the external storage unit, and wherein

digital data, updated after previously backed up in the external storage unit, of the digital data stored in the storage means is stored into the external storage unit according to a result of comparison from the comparison circuit.

5. The apparatus according to any of claims 1, 2, 3 and 4, further comprising:

a detection circuit that detects an optimum file of digital data for storage as a file into the external storage unit;

an aggregation circuit that aggregates a plurality of files into one file;

a division circuit that divides a file into files each having a predetermined size;

a synthesis circuit that combines the divided files together into one file; and

a separation circuit that separates one file formed from a plurality of files into the plurality of files, and wherein

for backup of the digital data:

digital data read by the aggregation circuit from the storage means are aggregated into one file;

the file as a result of the aggregation is divided by the division circuit according to the size detected by the detection circuit; and

the file as a result of the division being stored into the external storage unit; and
for decryption of the digital data:

the encrypted data stored in the external storage unit are decrypted and then combined by the synthesis circuit into its initial one file; and

the file as a result of the synthetic combination is separated by the separation circuit into the plurality of initial digital data and written back to the storage means.

6. The apparatus according to claim any one of claims 1 to 5, further comprising a communications circuit that makes information communications with an external certificate server, and wherein

an inquiry is made about whether the digital data to be decrypted may be restored to the external certificate server via the communications circuit, and the restoration is done only when the communications circuit has received a permission of restoration from the external certificate circuit.